

## NOTES AND NEWS.

REVERSAL OF CLEAVAGE IN PHYSA.—Mr. Henry E. Crampton, Jr., has recently studied the early stages of *Physa* and *Limnæa*. In the former the cleavage is according to the typically spiral type, but *totally reversed* in direction. It will be interesting to learn whether this is directly correlated with the sinistral form of the adult.

On the 28th of January last, A. TH. VON MIDDENDORFF, the celebrated traveller and zoologist died at his home near Dorpat. Middendorff is especially known to American conchologists as a writer on shells of the northwest coast.

BULIMUS OBLONGUS has recently been found by Mr. H. G. Hubbard, of the U. S. Agricultural Department, flourishing in St. Kitts, where it has been introduced from Antigua by a resident conchologist. This is perhaps, worth making a note of, since it has not been found so far north, and some one hereafter may suppose it native. Mr. Hubbard finds that a species of *Tillandsia* holds large quantities of water in the axils of the leaves; a good sized one he says will hold a barrel of water, and this water in the mountainous forests of Montserrat has a fauna of its own. He brought an *Amphibulima* (possibly *A. patula*) and *Pellicula* (? *depressa*) which he found in these moist retreats.—W. H. DALL, *in letter*.

PUPA SYNGENES Pils., has recently been received by the National Museum from Beaver Creek, Montana, (a tributary of the Little Missouri) in the river drift. This is a new locality, I believe, and interesting on account of its distance from the original place (Arizona).—W. H. DALL.

NOTE ON LIPARUS.—When studying the apices of the Australian land shells *Panda* and *Caryodes*, the writer had occasion to examine those of the Australian Bulimuli belonging to the subgenus *Liparus* of Albers. In this group the earlier whorls are very closely *pitted*, somewhat like a thimble, while in *Panda* they are decussated, and in *Caryodes* spirally lirulate. The characters of the earlier whorls seem to be of much greater importance than has generally been supposed. *Placostylus* agrees with *Liparus* in the peculiar pitting. *Bul.* (*Leucotænius*) *favannii* has a closely costulate apex, like our *B. schiedeannus*. The name *Liparus* in mollusca is preoccupied by *Liparus* Olivier, Entomologie, ou Hist. Nat. des Insectes, Vol.

V, pp. 73, 283 (1807), for a genus of Rynchophorous Coleoptera. I therefore suggest as a new name for the Australian group BOTHRIEMBRYON, the type being *Bul. melo*.—PILSBRY.

SPIRULA PERONII in Jamaica.—Mr. Edw. W. Roper reports finding a specimen of this cephalopod containing the animal, during his recent visit to Jamaica.

MR. F. C. BAKER has been appointed Curator of the zoological department of the Field Columbian Museum at Chicago.

The collection of shells of the late DR. PHILIP P. CARPENTER is offered for sale. This is an excellent opportunity to obtain a valuable and authoritatively named collection. Address Mrs. Minna M. Carpenter, 241 University St., Montreal, Canada.

SOME ARKANSAS SNAILS.—On my trip here (Fort Smith, Ark.,) I did what I did some years ago—walked from Winslow, on the top of the Boston Mountains, to Porter, six miles this side. I collected quite a number of shells, and will send you some living *Triodopsis edentata*, *Stenotrema labrosum*, *Polygra Sampsoni* and *P. Jacksoni*. I got the *edentata* from the top of the mountain to Rudy, a vertical distance of 1500 feet. At the latter place they are found with the ordinary *Triodopsis inflecta*. I hope you will have time to examine the internal parts. I find that where I got the type specimens was in Washington County, instead of Crawford; but on this trip I gathered them in both counties.—F. A. SAMPSON, *in letter*.

THE MICHIGAN FISH COMMISSION has commenced an investigation of biological conditions of the Great Lakes, with especial reference to the life history of the white fish. The work will include a determination of the fauna and flora of Lake Michigan at Ann Arbor, and of their vertical and horizontal distribution. This determination will be both qualitative and quantitative, and will be particularly directed towards a study of the life history of the white fish and lake trout. Since the life of the water constitutes first or last the food of the fish in it, this determination will afford some idea of the value of this locality as a breeding ground for fish and of its adaptability as a planting ground for the fry. The party at work in the laboratory will consist of various specialists, Mr. Bryant Walker, Detroit, Mich., taking charge of the mollusca.